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Image 1644
PATENT APPLICATION

Client Reference: 1998-30-00526VUS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re the Application of

COCCIA

Group Art Unit: 1644

Application No.: 09/856,534

Examiner: Phillip Gambel

Filed: September 4, 2001

Confirmation No.: 9135

For: TUMOR ANTIGEN-SPECIFIC ANTIBODY-GP39 CHIMERIC PROTEIN
CONSTRUCTS

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. One copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed before the mailing date of the first official action on the merits in the present application. No certification or fee is required.

Respectfully submitted,



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FORM PAT-1449 (modified) To: U.S. Department of Commerce (PW FORM PAT-1449) Patent and Trademark Office		Atty. Dkt. No.	M# 037003-0280624	Client Ref. 1998-30-0526VUS
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Applicant: COCCIA		
Date: January 16, 2004		Appln. No.: 09/856,534		
Page 1 of 4		Filing Date: September 04, 2001		
		Examiner: Gambel, P.		Group Art Unit: 1644

U.S. PATENT DOCUMENTS

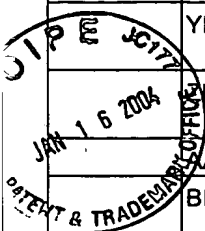
Examiner's Initials*	Document Number	Date MM/YYYY	Family Name of First Inventor	Class	Sub Class	Filing Date (if appropriate)
	AR	4,704,692	Ladner			
	BR	4,946,778	Ladner			
	CR	5,260,203	Ladner			
	DR	5,476,786	Huston			
	ER	5,648,237	Carter			
	FR	5,756,699	Better			
	GR	5,763,164	Calenoff			
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	IR	5,961,974	Armitage			
	JR	5,972,334	Denny			

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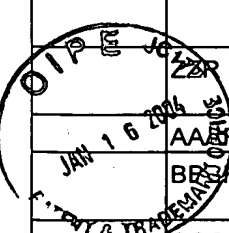
	Document Number	Date MM/YYYY	Country	Family Name of First Inventor	English Abstract	Translation Readily Available
	KR	WO 95/06481	WO	Noelle		
	LR					

OTHER (Including in this order Author, Date, Title, Periodical Name, Pertinent Pages, etc.)

MR	Alderson MR, <i>et al.</i> (1993) "CD40 expression by human monocytes: regulation by cytokines and activation of monocytes by the ligand for CD40," <i>J Exp Med</i> 178: 669-74.
NR	Allen RC, <i>et al.</i> (1993) "CD40 ligand gene defects responsible for X-linked hyper-IgM syndrome," <i>Science</i> 259: 990-3.
OR	Anichini A. <i>et al.</i> , (1987) "Clonal analysis of the cytolytic T-cell response to human tumors," <i>Immunol Today</i> , 8:385-389.
PR	Armitage RJ, <i>et al.</i> (1992) "Molecular and biological characterization of a murine ligand for CD40," <i>Nature</i> 357: 80-2.
QR	Aruffo A, <i>et al.</i> (1993) "The CD40 ligand, gp39, is defective in activated T cells from patients with X-linked hyper-IgM syndrome," <i>Cell</i> 72: 291-300.
RR	Austin FC, <i>et al.</i> (1979) "Virus augmentation of the antigenicity of tumor cell extracts," <i>Adv Cancer Res</i> 30: 301-45.
SR	Bartlett GL, <i>et al.</i> (1972) "Suppression of murine tumor growth by immune reaction to the Bacillus Calmette-Guerin strain of Mycobacterium bovis," <i>J Natl Cancer Inst</i> 48: 245-57.
TR	Bartlett WC, <i>et al.</i> (1989) "Cognate interactions between helper T cells and B cells. II. Dissection of cognate help by using a class II-restricted, antigen-specific, IL-2-dependent helper T cell clone," <i>J Immunol</i> 143: 1745-54.
UR	Biancone L, <i>et al.</i> (1999) "Activation of CD40 favors the growth and vascularization of Kaposi's sarcoma," <i>J Immunology</i> 163: 6201-8
VR	Bird RE, <i>et al.</i> (1988) "Single-chain antigen-binding proteins," <i>Science</i> 242: 423-6
WR	Brian AA (1988) "Stimulation of B-cell proliferation by membrane-associated molecules from activated T cells," <i>Proc Natl Acad Sci U S A</i> 85: 564-8



XR	Caron PC, <i>et al.</i> (1992) "Engineered humanized dimeric forms of IgG are more effective antibodies," <i>J Exp Med</i> 176: 1191-5.
YR	Chen L, <i>et al.</i> (1992) "Costimulation of antitumor immunity by the B7 counterreceptor for the T lymphocyte molecules CD28 and CTLA-4," <i>Cell</i> 71: 1093-102.
ZR	Claman HN, <i>et al.</i> (1969) "Immunologic complementation between thymus and marrow cells--a model for the two-cell theory of immunocompetence," <i>Transplant Rev</i> 1: 92-113
BAR	Clark EA (1990) "CD40: a cytokine receptor in search of a ligand," <i>Tissue Antigens</i> 36: 33-6.
BBR	Clement LT, <i>et al.</i> (1984) "Small, resting B cells can be induced to proliferate by direct signals from activated helper T cells," <i>J Immunol</i> 132: 740-4.
CCR	Clodi K, <i>et al.</i> (1998) "Unbalanced expression of Fas and CD40 in mantle cell lymphoma," <i>Br J Haematol</i> 103: 217-9.
DDR	Coloma MJ, <i>et al.</i> (1992) "Novel vectors for the expression of antibody molecules using variable regions generated by polymerase chain reaction," <i>J Immunol Methods</i> 152: 89-104.
EER	Corvalan JR, <i>et al.</i> (1988) "Tumour therapy with Vinca alkaloids targeted by a hybrid-hybrid monoclonal antibody recognising both CEA and Vinca alkaloids," <i>Int J Cancer Suppl</i> 2: 22-5.
FFR	Crow MK, <i>et al.</i> (1986) "Direct T helper-B cell interactions induce an early B cell activation antigen," <i>J Exp Med</i> 164: 1760-72.
GGR	Crow MK, <i>et al.</i> (1989) "Human peripheral blood T helper cell-induced B cell activation results in B cell surface expression of the CD23 (BLAST-2) antigen," <i>Cell Immunol</i> 121: 99-112.
HHR	DiSanto JP, <i>et al.</i> (1993) "CD40 ligand mutations in x-linked immunodeficiency with hyper-IgM," <i>Nature</i> 361: 541-3.
IIR	Dranoff G, <i>et al.</i> (1993) "Vaccination with irradiated tumor cells engineered to secrete murine granulocyte-macrophage colony-stimulating factor stimulates potent, specific, and long-lasting anti-tumor immunity," <i>Proc Natl Acad Sci U S A</i> 90: 3539-43.
JJR	Foy TM, <i>et al.</i> (1994) "gp39-CD40 interactions are essential for germinal center formation and the development of B cell memory," <i>J Exp Med</i> 180: 157-63.
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LLR	Galy AH, <i>et al.</i> (1992) "CD40 is functionally expressed on human thymic epithelial cells," <i>J Immunol</i> 149: 775-82.
MMR	Ghetie MA, <i>et al.</i> (1997) "Homodimerization of tumor-reactive monoclonal antibodies markedly increases their ability to induce growth arrest or apoptosis of tumor cells," <i>Proc Natl Acad Sci U S A</i> 94: 7509-14.
NNR	Goodman GE, <i>et al.</i> (1990) "Phase I trial of murine monoclonal antibody L6 in breast, colon, ovarian, and lung cancer," <i>J Clin Oncol</i> 8: 1083-92.
OOR	Gordon J, <i>et al.</i> (1988) "Resting B lymphocytes can be triggered directly through the CDw40 (Bp50) antigen. A comparison with IL-4-mediated signaling," <i>J Immunol</i> 140: 1425-30.
PPR	Grossmann ME, <i>et al.</i> (1997) "Antitumor responses induced by transgenic expression of CD40 ligand," <i>Hum Gene Ther</i> 8: 1935-43.
QQR	Gruber MF, <i>et al.</i> (1989) "Anti-CD45 inhibition of human B cell proliferation depends on the nature of activation signals and the state of B cell activation. A study with anti-IgM and anti-CDw40 antibodies," <i>J Immunol</i> 142: 4144-52.
RRR	Heufler C, <i>et al.</i> (1996) "Interleukin-12 is produced by dendritic cells and mediates T helper 1 development as well as interferon-gamma production by T helper 1 cells," <i>Eur J Immunol</i> 26: 659-68.
SSR	Hirohata S, <i>et al.</i> (1988) "T cell-dependent activation of B cell proliferation and differentiation by immobilized monoclonal antibodies to CD3," <i>J Immunol</i> 140: 3736-44.
TTR	Hodgkin PD, <i>et al.</i> (1990) "Separation of events mediating B cell proliferation and Ig production by using T cell membranes and lymphokines," <i>J Immunol</i> 145: 2025-34.
UUR	Hollenbaugh D, <i>et al.</i> (1992) "The human T cell antigen gp39, a member of the TNF gene family, is a ligand for the CD40 receptor: expression of a soluble form of gp39 with B cell co-stimulatory activity," <i>Embo J</i> 11: 4313-21.
VVR	Hollenbaugh D, <i>et al.</i> (1994) "The role of CD40 and its ligand in the regulation of the immune response," <i>Immunol Rev</i> 138: 23-37.
WWR	Honda S, <i>et al.</i> (1990) "A human hybrid hybridoma producing a bispecific monoclonal antibody that can target tumor cells for attack by <i>Pseudomonas aeruginosa</i> exotoxin A," <i>Cytotechnology</i> 4: 59-68.
XXR	Houghton AN, <i>et al.</i> (1985) "Mouse monoclonal IgG3 antibody detecting GD3 ganglioside: a phase I trial in patients with malignant melanoma," <i>Proc Natl Acad Sci U S A</i> 82: 1242-6.



YYR	Huston JS, <i>et al.</i> (1988) "Protein engineering of antibody binding sites: recovery of specific activity in an anti-digoxin single-chain Fv analogue produced in <i>Escherichia coli</i> ," <i>Proc Natl Acad Sci U S A</i> 85: 5879-83.
ZZR	Jakobson E, <i>et al.</i> (1998) "Stimulation of CD40 in human bladder carcinoma cells inhibits anti-Fas/APO-1 (CD95)-induced apoptosis," <i>Int J Cancer</i> 77: 849-53.
AAER	Janeway CA, Jr., <i>et al.</i> (1988) "CD4+ T cells: specificity and function," <i>Immunol Rev</i> 101: 39-80.
BBER	Kato K, <i>et al.</i> (1998) "Gene transfer of CD40-ligand induces autologous immune recognition of chronic lymphocytic leukemia B cells," <i>J Clin Invest</i> 101: 1133-41.
CCCR	Katz DH, <i>et al.</i> (1973) "Cell interactions between histoincompatible T and B lymphocytes. The H-2 gene complex determines successful physiologic lymphocyte interactions," <i>Proc Natl Acad Sci U S A</i> 70: 2624-8.
DDDR	Koch F, <i>et al.</i> (1996) "High level IL-12 production by murine dendritic cells: upregulation via MHC class II and CD40 molecules and downregulation by IL-4 and IL-10," <i>J Exp Med</i> 184: 741-6.
EEER	Korthauer U, <i>et al.</i> (1993) "Defective expression of T-cell CD40 ligand causes X-linked immunodeficiency with hyper-IgM," <i>Nature</i> 361: 539-41.
FFFR	Lane P, <i>et al.</i> (1992) "Activated human T cells express a ligand for the human B cell-associated antigen CD40 which participates in T cell-dependent activation of B lymphocytes," <i>Eur J Immunol</i> 22: 2573-8.
GGGR	Leclerc JC, <i>et al.</i> (1973) "Cell-mediated immune reaction against tumors induced by oncornaviruses. II. Nature of the effector cells in tumor-cell cytolysis," <i>Int J Cancer</i> 11: 426-32.
HHHR	Lederman S, <i>et al.</i> (1992) "Identification of a novel surface protein on activated CD4+ T cells that induces contact-dependent B cell differentiation (help)," <i>J Exp Med</i> 175: 1091-101.
IIIR	Lennartz MR, <i>et al.</i> (1991) "Arachidonic acid is essential for IgG Fc receptor-mediated phagocytosis by human monocytes," <i>J Immunol</i> 147: 621-6.
JJJR	Mitchison NA (1970) "Immunologic approach to cancer," <i>Transplant Proc</i> 2: 92-103.
KKKR	Mitchison NA (1971) "The carrier effect in the secondary response to hapten-protein conjugates. V. Use of antilymphocyte serum to deplete animals of helper cells," <i>Eur J Immunol</i> 1: 68-75.
LLLR	Noelle RJ, <i>et al.</i> (1991) "Cognate interactions between helper T cells and B cells. V. Reconstitution of T helper cell function using purified plasma membranes from activated Th1 and Th2 T helper cells and lymphokines," <i>J Immunol</i> 146: 1118-24.
MMMR	Noelle RJ, <i>et al.</i> (1992) "A 39-kDa protein on activated helper T cells binds CD40 and transduces the signal for cognate activation of B cells," <i>Proc Natl Acad Sci U S A</i> 89: 6550-4.
NNNR	Noelle RJ, <i>et al.</i> (1990) "Cognate interactions between helper T cells and B cells," <i>Immunol Today</i> 11: 361-8.
OOOR	Noelle RJ, <i>et al.</i> (1991) "T helper cell-dependent B cell activation," <i>Faseb J</i> 5: 2770-6.
PPPR	North RJ (1984) "Models of adoptive T-cell-mediated regression of established tumors," <i>Contemp Top Immunobiol</i> 13: 243-57.
QQQR	Oettgen, H.F., <i>et al.</i> , (1991) in <i>Biologic Therapy of Cancer</i> , The History of Cancer Immunotherapy, Devita, V.T., <i>et al.</i> , Eds., Lippincott, Williams & Wilkins, Philadelphia, PA, pp. 87-119.
RRRR	Old <i>et al.</i> , 1962, Antigenes of Tumor Cells, "Antigenic Properties of Chemically Induced Tumors," in <i>Ann N.Y. Acad Sci.</i> , 101:80-106.
SSSR	Pardoll DM (1993) "Cancer vaccines," <i>Immunol Today</i> 14: 310-6.
TTTR	Pimm MV, <i>et al.</i> (1990) "A bispecific monoclonal antibody against methotrexate and a human tumour associated antigen augments cytotoxicity of methotrexate-carrier conjugate," <i>Br J Cancer</i> 61: 508-13.
UUUR	Pollok KE, <i>et al.</i> (1991) "The development of competence in resting B cells. The induction of cyclic AMP and ornithine decarboxylase activity after direct contact between B and T helper cells," <i>J Immunol</i> 146: 1633-41.
VVVR	Porgador A, <i>et al.</i> (1993) "Antimetastatic vaccination of tumor-bearing mice with two types of IFN-gamma gene-inserted tumor cells," <i>J Immunol</i> 150: 1458-70.
WWWR	Porgador A, <i>et al.</i> (1989) "H-2Kb transfection of B16 melanoma cells results in reduced tumorigenicity and metastatic competence," <i>J Immunogenet</i> 16: 291-303.
XXXR	Porgador A, <i>et al.</i> (1993) "Anti-metastatic vaccination of tumor-bearing mice with IL-2-gene-inserted tumor cells," <i>Int J Cancer</i> 53: 471-7.
YYYR	Raff MC (1970) "Role of thymus-derived lymphocytes in the secondary humoral immune response in mice," <i>Nature</i> 226: 1257-8.
ZZZR	Raso V, <i>et al.</i> (1981) "Hybrid antibodies with dual specificity for the delivery of ricin to immunoglobulin-bearing target cells," <i>Cancer Res</i> 41: 2073-8.

AAAAAR	Rouse BT, <i>et al.</i> (1972) "Anti-theta serum-induced suppression of the cellular transfer of tumour-specific immunity to a syngeneic plasma cell tumour," <i>Nat New Biol</i> 238: 116-7.
BBBBBR	Roy M, <i>et al.</i> (1993) "The regulation of the expression of gp39, the CD40 ligand, on normal and cloned CD4+ T cells," <i>J Immunol</i> 151: 2497-510.
CCCCCR	Schreiber H., (1993) in <i>Fundamental Immunology</i> , Tumor Immunology, 3 rd edition, W. Paul, Ed., Raven Press, NY, , Ch. 32, pp. 1143-1178.
DDDDR	Sekita K, <i>et al.</i> (1988) "B cell-stimulating activity of lymphoid cell membrane fractions," <i>Eur J Immunol</i> 18: 1405-10.
EEEEER	Shopes B (1992) "A genetically engineered human IgG mutant with enhanced cytolytic activity," <i>J Immunol</i> 148: 2918-22.
FFFFFR	Songsivilai S, <i>et al.</i> (1990) "Bispecific antibody: a tool for diagnosis and treatment of disease," <i>Clin Exp Immunol</i> 79: 315-21.
GGGGR	Spriggs MK, <i>et al.</i> (1992) "Recombinant human CD40 ligand stimulates B cell proliferation and immunoglobulin E secretion," <i>J Exp Med</i> 176: 1543-50.
HHHHR	Staerz UD, <i>et al.</i> (1985) "Hybrid antibodies can target sites for attack by T cells," <i>Nature</i> 314: 628-31.
IIIIIR	Stamenkovic I, <i>et al.</i> (1989) "A B-lymphocyte activation molecule related to the nerve growth factor receptor and induced by cytokines in carcinomas," <i>Embo J</i> 8: 1403-10.
JJJJR	Talmadge JE, <i>et al.</i> (1980) "Role of natural killer cells in tumor growth and metastasis: C57BL/6 normal and beige mice," <i>J Natl Cancer Inst</i> 65: 929-35.
KKKKR	Urban JL, <i>et al.</i> (1986) "Tumor necrosis factor: a potent effector molecule for tumor cell killing by activated macrophages," <i>Proc Natl Acad Sci U S A</i> 83: 5233-7.
LLLLR	Valle A, <i>et al.</i> (1989) "Activation of human B lymphocytes through CD40 and interleukin 4," <i>Eur J Immunol</i> 19: 1463-7.
MMMMR	Van den Eertwegh AJ, <i>et al.</i> (1993) "In vivo CD40-gp39 interactions are essential for thymus-dependent humoral immunity. I. In vivo expression of CD40 ligand, cytokines, and antibody production delineates sites of cognate T-B cell interactions," <i>J Exp Med</i> 178: 1555-65.
NNNNR	Van Pel A, <i>et al.</i> (1982) "Protection against a nonimmunogenic mouse leukemia by an immunogenic variant obtained by mutagenesis," <i>Proc Natl Acad Sci U S A</i> 79: 4718-22.
OOOOR	Vitetta ES, <i>et al.</i> (1989) "Cellular interactions in the humoral immune response," <i>Adv Immunol</i> 45: 1-105.
PPPPR	Weber JS, <i>et al.</i> (1988) "Modulation of murine tumor major histocompatibility antigens by cytokines in vivo and in vitro," <i>Cancer Res</i> 48: 5818-24.
QQQQR	Whalen B.J. <i>et al.</i> , (1988) "Characterization of the effector mechanism of help for antigen-presenting and bystander resting B cell growth mediated by IA-restricted Th2 helper T cell lines," <i>J Immunol.</i> , 141:2230-2239.
RRRRR	Whitworth PW, <i>et al.</i> (1990) "Macrophages and cancer," <i>Cancer Metastasis Rev</i> 8: 319-51.
SSSSR	Yamada A, <i>et al.</i> (1989) "Fc gamma 2b receptor-mediated phagocytosis by a murine macrophage-like cell line (P388D1) and peritoneal resident macrophages. Up-regulation by the inhibitors of phospholipase A2 and cyclooxygenase," <i>J Immunol</i> 142: 2457-63.
TTTTTR	Zinkernagel RM (1976) "T helpers may be sensitized by antigen-specifically altered structures, which are coded by the I region of the H-2 gene complex," <i>Adv Exp Med Biol</i> 66: 527-30.
UUUUR	Zoller M, <i>et al.</i> (1988) "Interferon-gamma treatment of B16 melanoma cells: opposing effects for non-adaptive and adaptive immune defense and its reflection by metastatic spread," <i>Int J Cancer</i> 41: 256-66.
VVVVR	

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.